Engineering and Mining Journal

Index to

VOLUME 132

July—December

1931

McGRAW-HILL PUBLISHING COMPANY, INC.

330 West 42d St., New York, N. Y.

Engineering and Mining Journal

Index to Volume 132 - - - July to December, 1931

Explanatory Note

THE general index to this volume is preceded by a list of the editorials published in the volume, and is followed by an index of authors. In the general index editorials are denoted by the letter "e" and news items by the letter "n." Following is a list of the pages included in the numbers of the volume by date:

July 13	1 to 48
July 27	49 to 96
Aug. 10	97 to 144
Aug. 24	145 to 192
Sept. 14	193 to 240
Sept. 28	241 to 286
Oct. 12	287 to 342
Oct. 26	343 to 390
Nov. 9	391 to 434
Nov. 23	435 to 476
Dec. 14	477 to 516
Dec. 28	517 to 558

EDITORIALS

Accident avoidance and the language problem 50
Acid as an aid in technical analysis.... 3
Adjusting international supply and demand 436
Advantages of stable prices 393
All should share the unemployment burden 477
And competent engineers are idle..... 479
Automatic processing of non-metallics.. 393
Building with metals offers great opportunities 193
Comparing per-ton grinding costs..... 242
Compensation awards 519
Economic conditions and the gold-mining industry 98
Extraction responds to careful technique 518
Flotation as a preliminary to cyanidation 194
Flotation extends into new fields..... 477
Forced lubrication without a pump.... 3
Gold production reaching new peaks.. 479
Good ideas need commercial exploitation 146
Heat conservation by mineral insulation 343
Helping to suppress tuberculosis is more than a day 519
Homestake enterprise 287
Industrial ministers turn international... 391
Improved technique in non-metallic processing 517
Insulation, air conditioning and the mining industry 517
Loss of morale must be avoided..... 478
Manhattan mining dust hazards..... 1
Mechanization trend will still be forward 243
Men and money make mines, even gold mines 49
Mine and mill construction supervision. 518
Mining and metallurgical progress in Germany 145
More Canadian mining wonders..... 435
Necessity and ingenuity in filtration practice 344
New phase of gold mining 344
New producers and the consumption factor 2
On planning to secure economic equilibrium 391
Opportunities for metals in the building field 345
Order out of chaos through standardization 50
Ore-dressing plants and construction materials 98
Ore uniformity and the flotation process 146
Planning without insurance provision is futile 436
Power plants provide important mercury outlet 392
Power developments stimulate copper consumption 193
Presidency of the Institute 478
Prospecting pan shortage is good news.. 50
Questionable methods of financing mines 345
Reducing the blasting-cap hazard..... 2
Restaurant owner goes out to dine.... 145
Re-treatment of residue dumps..... 2
Road building, automobiles, and the mining industry 392
Safety Council attacks fundamental problems 241
Scope and encouragement for inventive initiative 147
Setting light to work in industry..... 242
Sickness brings plans for health..... 343
Simplification and standardization may begin at home 146
Society of Chemical Industry celebrates its jubilee 145
Solving the industrial dispute problem. 147
Surface factor in grinding media..... 392
Technologic unemployment of commodities 3
Technology, not finance or politics..... 49
To a pioneer in hydrometallurgical research 97
To Bisbee—The first fifty years are the hardest 97
Uncontrolled individualism and its aftermath 241
Unemployment, challenge to education.. 435
Unintelligent criticism should be ignored. 193
United States still has its craftsmen... 478
Why not more metallic publicity for the metals? 243
Zinc may have promising future..... 194
Zinc Institute follows product beyond ingot stage 98

GENERAL INDEX

A

Abana Mines n180
Acha-Saya district n84
Acid as aid in technical analysis..... e3
Advertising—Restaurant owner goes out to dine e145
Alaska Juneau n180, n227, n465
Aldermac Mines n465
Aluminum Company n132
American Development Co..... n180
American Institute of Mechanical Engineers—Meeting n278, n427
American Manganese Producers' Assn..... n470
American Metal n422
American Mining Congress..... n382, n504
American Nettie n33
American Silver Producers Assn..... 378
American Smelting & Refining..... n83, n135, n183, n229, n230
American Zinc Institute—Follows product beyond ingot stage e98
Amtorg Trading Corp.—Sued by Rukeyser 36
Anaconda Copper..n83, n227, n229, n380, n470, n506
Ankerits n35
Argo Mines n84
Argonaut Consolidated n33
Gold-milling 265
Arizona—Assessor reduces valuation of Arizona copper mines 85
Asbestos in Vermont. F. A. Westbrook... *491
Ashanti Goldfields n510
Ashley Gold n376
Asphalt—Mining asphalt in Cuba. A. E. Northey *66
Assaying—Automatic pulp sampling and distribution. I. S. Heller *480
Gold at Homestake. N. Herz..... *308

Australia

Lead poisoning checked 488

B

Bahia Corp. n181
Baker Island n506
Balatoc Mining n227
Ballard Gold Mining n34
Baltic n424
Barite—Mining and concentration at Meggen. R. Glatzel *155
Washed-gravel as byproduct of barite ore industry. H. D. Keiser *266
Barry Hollinger n131
Bauxite mining in Arkansas *449
Benguet Consolidated n130
Big Belt Gold Mining n133
Big Jim n230
Bingham Bemis Mining n506
Bisbee—First fifty years are the hardest..e132
Bisichi Tin n184
Black Donald Graphite n37
Blasting—Mining practice at the Montreal Mine. A. H. Hubbell *113
Reducing the blasting-cap hazard..... e2
Blue-eyed Maggie n135
Bob, C. V., sues n132
Boleo Copper n38

Bolivia

Prospecting and exploration. J. B. Chamberlain *437

Book Reviews and Digests

Africa unveiled. Owen Letcher..... 462
Applied geophysics. Shaw, Bruckshaw & Newing 417
Canadian geologist. W. A. Loudon..... 539
Copper deposits of the watershed of Congo and Zambesi Rivers. P. Kovaloff 539
Deep well drilling. W. H. Jeffery..... 462
Descriptive petrography of the igneous rocks. A. Johannsen 540
Determination of the Opaque Minerals. C. Mason Farnham 76
Die flotation. Dr. Ing. W. Luyken and Dr. Ing. E. Bierbrauer 417
Digest of mining laws of Canada..... 76
Elements of engineering geology. Ries & Watson 76
Engineering metallurgy 76
Erzmikroskopische Bestimmungstafeln. Schneiderhonn & Ramdohr 418
Etude Sur La Prospection Electrique du Sous-Sol. C. Schlumberger..... 417
Field geology. F. H. Lahee..... 75
Metal statistics, 1931. Ed. by Luty & Langer 76
The mineral industry during 1930. G. A. Roush 462
Mineral industry of the British Empire and foreign countries 462
Mineral resources in the United States, 1928 76
The Mines Handbook. Rand & Sturgis.. 75
Modern Diesel engine practice. O. Adams. 418
Modern steam turbine. Prof. Dr. Ing. E. A. Kraft 75
Principles and practice of geophysical prospecting. Ed. by Edge & Laby.... 417
Phychology of the inventor. Joseph Rossman 76
Prospecting for gold. I. L. Idriess..... 539
Quicksilver. C. N. Schuette 418
Rhodesian Manual on Agriculture, Industry and Mining 76
A selected list of books and references on Geophysical Prospecting. C. A. Heiland and D. Wantland 418
Silicosis: Series F., Industrial Hygiene.. 75
Spectrum analysis in mineralogy. A. A. Fitch 539
Standard Metal Directory, 1931..... 462
Standards and specifications for nonmetallic minerals and their products.. 540
Treatise of Leather Belting. Haven & Swett 76
Werkstoffe physikalische eigenschaften und korrosion 540
World Minerals and World Politics. C. K. Leith 74
Zinc, second edition 540

Borneo

Diamond mining. S. H. Ball 200
Boss Tweed Clipper Gold n34, n230

Brazil:

Copper resources of Brazil. L. F. de Moraes Rego 401

British Columbia

Pioneer Gold. I. B. Joralemon *483
Summarizing Consolidated Mining & Smelting's activities. G. J. Young... *120
Broken Hill Associated Smelters — Lead poisoning checked 488
Materials handling by telpher at Port Pirie *356
Broken Hill Ply..... n38
Broken Hill South..... n39, n131, n427
Buckeye Gold n469
Bulolo Dredging n38
Bulolo Gold—Air transportation speeds construction *231, n509
Bunker Hill & Sullivan n465
Burma Corp. n469

e editorial; n news; c comment and criticism

Science
Wehr

C

Calender—Simplification and standardization may begin at home e146
California-Alder Gulch.....n87, n133, n424
Calumet & Arizona n83
Calumet & Hecla Consolidated.n181, n377, n466
Modern power plant at Ahmeek Mill.. 30
Camp Bird n544

Canada

Cyaniding 40-mesh pulp at Red Lake, Ontario. W. M. Goodwin.....*109
Facts vs. fiction about Great Bear Lake. E. E. Campbell c500
More Canadian mining wonders.....e435
Nickel smelter boasts world's largest pulverized-coal plant. C. F. Herington.*219
Pre-Cambrian publicity. C. M. Campbell.*209
Pre-Cambrian publicity. F. L. Garrison.c371
Quarrying and transporting limestone in Canada. M. F. Goudge *411
Cananea Consolidated Copper n38
Carbonate manganese ore found n470
Cement—Mining and processing of cement materials. J. B. Nealey *63
Centennial Consolidated Mining n135
Central Eureka n33
Cerite discovered in Colorado n180
Cerro de Pasco Copper n84, n230
Champion n424

Charts

Bin-wall pressure chart. S. C. Mifflen.. 655
Determining results graphically in one-product concentration. Bela Low....*524
Rope-drum chart. S. C. Mifflen..... 248
Suspension bin chart. S. C. Mifflen.. 498
Chateaugay Ore & Iron Co.—Automatic control of mine plant motors. H. W. Chadbourne *534
Chelan n35
Chief Consolidated Mining n87
Chihuahua Gold to be searched for.....n227
China clay in Cornwall. E. H. Davison....*264
Chosen Corporation—Mining methods. A. A. Friedman *453
Christy, Professor—To a pioneer in hydrometallurgical research e97
Chromite possibilities n229
City Deep n36, n424
Cleary Hill Alaska Mines n423
Cleveland-Cliffs Iron Company — Open-pit mining. A. H. Hubbell.....*443, *486
Coal—Canadian nickel smelter boasts world's largest pulverized-coal plant. C. F. Herington *219
Colorado Fuel & Iron n466
Commonwealth Mines Preliminary Syndicate n136
Compagnie du Boleo—Description of property. J. B. Huttl *346
Mining copper in Baja California. M. Bellanger *394
Smelting copper ore in Baja California. M. Bellanger *440
Comstock Tunnel & Drainage n546

Concentration

Automatic pulp sampling and distribution. I. S. Heller *480
Ball milling and amalgamation in lower California c29
Calculating average particle size from screen analysis. F. C. Bond..... 15
Chart for one-product concentration. Bela Low *524
Crushed-stone and ore-dressing plant. H. D. Keiser *4
Dredge-sluice efficiency. B. W. Bellinger. 403
Gold-milling at the Argonaut Mine.... 265
Gold-ore mining and milling—Sixteen-to-One. G. J. Young *195
Hydraulic classification raises phosphate washery efficiency. R. G. O'Meara...*529
Mining and concentration at Meggen. R. Glatzel *155
Rubber pipe lining minimizes pulp abrasion. D. D. Homer.....*367
Standardization of screening data urged. C. E. Bartlett c460
Surface factor in grinding media.....e392
Underground mill of Empire Zinc Company at Gilman, Colorado. W. O. Borcherdt *251
Coeur d'Alene district n83
Concrete sand and crushed stone from mine waste and mill tailing. A. H. Hubbell..*526
Consolidated Coppermines n35, n36
Consolidated Diamond Mines n184
Consolidated Feldspar n38
Consolidated Lead & Zinc.....n507, n547
Consolidated Metals n380
Consolidated Mining & Smelting....n37, n136
Summarizing its activities. G. J. Young.*120

Copper

Boleo enterprise. J. B. Huttl.....*346
India's only copper producer. R. B. Woakes *51
Mining and smelting at Mansfeld. Emil Schrodter *148
Mining in Baja California. M. Bellanger*394
Norddeutsche Affinerie. E. van Erckelens.*160
Power developments stimulate consumption e193
Production costs in the Americas in 1930. S. D. Strauss 68
Prospecting for Congo copper.....n230
Resources of Brazil. L. F. de Moraes Rego 401
Smelting copper ore in Baja California. M. Bellanger *440
Suggestions for converter operators. F. E. Wing c537
Copper Mfgrs. Assn. n33
Copper Range.....n228, n467, n424
Shaft mucking with a scraper. A. H. Hubbell 124
Cosach n230

Costs

Comparing per-ton grinding costs.....e242
Exploration methods and costs at Empire Zinc at Gilman. H. N. Lary.....*353
Mine costs. M. J. Elsing 106
Mucking costs. M. J. Elsing..... 207
Shaft sinking cost. M. J. Elsing..... 349
Cotter Butte n546
Crown Dredging & Mining n273
Crushed stone and concrete sand from mine waste and mill tailing. A. H. Hubbell.*526
Crystal Lead n544

Cuba

Asphalt mining. A. E. Northey *66
Cyanidation. See Metallurgy.

D

Daggafontein n510
Dawes Gold n505
Diamonds—Mining in Borneo. S. H. Ball. 200
Dix-Butte Placer Mining n505
Dome Mines n181
Domestic Manganese & Development.....n467
Dredge, moving overland *11

Drills and Drilling:

Deep-hole and diamond drilling at Empire Zinc at Gilman. H. N. Lary *353
Dust eliminators prevent silicosis..... *16
Gold prospecting aided by light weight core drills. Jessen & Lindhe.....*373
Pneumatic drill puller for diamond drilling *450
Proper maintenance of blast-hole drills insures longer life. J. Reynard..... 419
Reducing diamond-drilling costs.....*501
Setting small, uniformly sized bort in core drill bits. G. J. Young.....*501
Tempering with a color-matching device.*247
Water swivel for diamond drills.....*212
Dumps—Re-treatment of residue dumps.. e2
Dunnellon Phosphate Mining n466
Dust eliminators prevent silicosis..... *16
Dust hazards in Manhattan e1

E

Eagle Picher n276, n507, n547
East Geduld n39, n469
Economic equilibrium e391
Economics—Adjusting international supply and demand e436
El Oro Mining & Railway n379
El Tambor n131, n180
Eldorado Gold Mines n82, n88
Electric, electrical. See Power, Equipment.
Electrochemical Society meeting..... 230
Empire Zinc. See New Jersey Zinc.
Engineering—And competent engineers are idle e479
Colorado School of Mines graduates work at Cripple Creek *545
Common sense, plus experience, superior to technical training. R. B. Woakes..c222
Engineering and Mining Journal.....n278
Historical summary 1
Technology, not finance or politics..... e49
Engineering and Mining Journal and Engineering and Mining World amalgamate.. 500
Engineers—Loss of morale must be avoided.e478
Professor's personalities. P. B. McDonald c461

Equipment

Aligning conveyor belts *448
Aluminum for fencing 178
Amalgamating machine using centrifugal force *224
Apparatus for geophysical work.....*542
Blowers, heavy-duty rotary positive.... 178
Bucket elevators, design and care..... 492
Bucket loader *270
Bucket, scraper 542
Cage, self-dumping *178
Car, all-steel mine *30
Car, one-piece underframes for..... 541
Cement research planned 420
Chain sheaves have safety device.....*250
Classifier lifting device *368
Classifier, mechanical *31
Clothes hanger for change room..... *69
Clutch facing 81
Coal-pulverizing equipment 421
Compound for acid-proofing tanks..... 270
Compressor suction strainer *410
Compressors, portable 179
Control and economy devices at Homestake. R. J. Hall *305
Controller for mill work 269
Conveyor drive *454
Conveyors, automatic log *55
Conveyor, rotary pipe *226
Conveyor scale uses photo-electric cell...*541
Cutout for reverse current *442
Deflecting plate for automatic sample cutter *62
Drill, electric, improved *503
Drill press *263
Drill puller, pneumatic, for diamond drilling *450
Drill sharpener 269, 270
Drill-steel cutter *482
Drive, short-center belt *271
Dust collector *270
Earth resistivity meter 226
Electric equipment for salt mining. Leo Reid *405
Electrification and shaft sinking at Newport Mine. A. H. Hubbell *213
Electricity in limestone mining. F. P. Brightman *205
Elevators, electric shaft. R. I. C. Manning *520
Excavator, convertible *179, 269
Excavators of small size 420
Fan, aerobladed *375
Feeder, disk 420
Feeder, heavy-duty apron *177
Feeder, mammoth, in nitrate industry.. 271
Feeder, reagent 31
Feeder to handle rock fragments..... 421
Filter, vacuum *463
Floodlight 541
Floodlight, portable *177
Flotation test plant re-designed.....*420
Fuel pump casing puller *530
Gate, apron *464
Gear blanks, welded 32
Generator, standard steam *80
Ground pressure and movement indicated by two devices *79
Hat, protective *79
Hoist with double drums 503
Hoist, safety 32
Hoist, slusher 503
Hoists, trolley 271
Homestake electric operation. J. F. Wiggert *316
Hose, metal flexible 178
Hydrometer 32
Illuminometer for conducting lighting surveys *503
Insulation colored enamel 178
Insulator for furnaces 32
Lathe screw jack *448
Locomotive, electric 421
Locomotive, gasoline *543
Locomotive with greater hauling capacity.*179
Lubricating open gears 32
Machine tool for horizontal boring, drilling and milling *81
Magnet, electric 503
Magnetometer improved 503
Metallgesellschaft—Process development and plant construction *172
Meter measures variable air flow..... *80
Mill effect classification and reduction by impact.....*225
Montreal mine equipment. A. H. Hubbell *113
Motor-armature puller *406
Motor-coil winding machine *112
Motor starter 269
Motor starters for hazardous places....*177
Motor, steel-mill type 177
Motors, vertical d.c. *179
Oiler, multiple automatic *178
Photo-electric controller for lighting.... 541
Pipe-flange facing tool *492
Potentiometer-pyrometer 32
Pulley surface covering 270
Pulverizer for coal *80
Pump, centrifugal, non-clogging 31
Pump for general use 81
Pump for handling abrasives.....*270
Reducer housings welded *81
Relay for indoor lighting-control 271
Rubber developments 31
Sampler, electric *31
Samplers used at Empire Zinc. I. S. Heller *480
Scale, laboratory 421
Scraper design *119
Scraper with device for turning corner.*269
Screen, steel woven wire..... 178
Screen, two-roll vibrating *129
Screening, abrasive-resisting 543
Screen-mounting 543
Separator, magnetic *178
Sheaves for V-belt drives *32
Shovel, balanced hoist feature of *541
Sieves for testing purposes 420

Sintering machine, costs of maintaining low 463
Speed reducer *81
Steel bands for conveyors 81
Stoper, hand-rotated 271
Switch, four-way signal *204
Switch, safety, for electric blasting *485
Telephone, outdoor 543
Tensiometer *32
Theodolite for Houghton *502
Tool holder for tapping roaster rabble arms *348
Tools, stellite-tipped *439
Tractor *31
Transmission, electro-hydraulic *271
Trolley-wire guard *267
Vee blocks home made *494
Weighing scale 81
Welding elbows *179
Welding goggles *129
Welding, pipe fittings for *81
Welding set 178
Equipment. See also Transportation, Maintenance.
Esmeralda Gold n88
Eureka Standard n83
Eva Gold n275
Evans-Wallower n549
Evergreen—Open-pit mining. A. H. Hubbell *443, *486
Sintering Minnesota iron ore. A. H. Hubbell *244
Ex-Lands Nigeria n136

F

Falconbridge Nickel n133, n136
Federal Consolidaetd n33
Federal Mining & Smelting n504
Feldspar—Decrease in duty opposed n278
Nevada property ships n132
Filtration practice e344
Fireball Mines n88

Flotation

As a preliminary to cyanidation e194
Concentration of iron ore by flotation. E. Mayer c416
Consumption of flotation reagents 409
Extends into new fields e477
Extension of the process into new fields. M. S. Hansen c416
Giesche's Erben enterprise. Fritz Lakwey. *151
Hematite flotation, a laboratory success. Adams, Kobey & Sayers 54
Ore uniformity and the flotation process. e146
Reagents. A. M. Gaudin 70
Underground mill of Empire Zinc Company at Gilman, Colorado. W. O. Borcherdt *251
Ford's Blueberry Mine—Description of plant. A. H. Hubbell *360
Ford Motor n509

Freight Rates

Fight against increase n276
Freight rates n422
How attention to traffic conditions cuts costs. A. L. Russell 451
Shasta County cut n506
Traffic problems in the mining industry. A. L. Russell c537
Fresnillo Mines n229
Frick Coke Co.—Automatic control of mine plant motors. H. W. Chadbourne *534

G

Gas. See Natural Gas.
General Manganese n507

Geology

Geology and origin of the phosphate deposits of Tennessee. R. W. Smith *58
Kirkland Lake. R. D. Hoffman *493
Mapping in Montana n135
Mining in British South Africa. W. B. Timm *22
Mining maps. D. C. Gilbert *18
New quicksilver discoveries. W. M. Weigel *495
Ore genesis and structure at Homestake. D. H. McLaughlin *324
Pioneer Gold: British Columbia's potential bonanza. I. B. Joralemon *483

Germany

Berzelius zinc smelters. Seiffert, Koch & Matthies *165
Giesche's Erben enterprise. Fritz Lakwey. *151
Leading metal organization celebrates its fiftieth anniversary *154
Mining and concentration at Meggen. R. Glatzel *155
Mining and metallurgical progress e145
Mining and smelting at Mansteld. Emil Schrodter *148
Norddeutsche Affinerie. E. van Erckelens. *160
Process development and plant construction *172
Research and development work *170
Giesche's Erben. Fritz Lakwey *151
Golconda Lead n546

Gold

Amalgamating gold ores and sands with aid of centrifugal force *224
Australia cuts gold bounty n131
Conservative development of gold prospects. J. W. Prendergast c371
Cyaniding 40-mesh pulp at Red Lake, Ontario. W. M. Goodwin *109
Economic conditions and the gold-mining industry e98
Extraction and recovery of gold. P. A. Robbins c78
Facts and figures. S. D. Strauss 335
Gold in south east Peru. Fernando Fuchs. c370
Men and money make mines, even gold mines e49
Milling at the Argonaut Mine 265
Mining and milling at Sixteen-to-One. G. J. Young *195
Mining in Korea. A. A. Friedman *453
New phase of gold mining e344
Production reaching new peaks e479
Properties offer opportunity for mining company diversification. G. M. Colvocoresses c174
Prospecting embraces entire world 182
Silver and gold recovery from tin slime. J. B. Kasey 217
Gold. See also Homestake Mining.
Gold Cord n272
Gold Creek Mining n227, n424
Gold Fields Rhodesian Development n377
Gold Gulch Mining n509
Gold Hill n181
Gold Metals n131
Goldfield activity n272
Golinsky area n275
Gravel, washed, produced as byproduct of barite ore industry. H. D. Keiser *266
Gravel plant adopts ore-dressing practice. G. J. Young *72
Great Bear Lake n504
Great Boulder Party n39

Great Britain

China clay in Cornwall. E. H. Davison *264
Iron mining in Cumberland, England. Lucien Eaton *455
Grootvlei Proprietary Mines n39

H

Hammon Consolidated Gold Fields—Moving a gold dredge overland *11
Hammond River n509
Hanna Ore Mining—Open-pit mining. A. H. Hubbell *443, *486
Haulage. See Transportation.
Hecla Mining n183, n466
Hedley Gold n232
Helium in Michigan copper district 37
Hidalgo Mines n272
Hillman Coal & Coke Co.—Automatic control of mine plant motors. H. W. Chadbourne *534
Hollinger Consolidated Gold n82
Holman-Cliffs n381
Homestake Mining n276
Assaying. Nathaniel Herz *308
Control and economy devices. R. J. Hall. *305
Editorial 287
Electric operation. J. F. Wiggert *316
Equipment inspection and repair. S. J. Staple *318
Health protection and hospital service. R. B. Fleeger *334
History—then and now *288
History of Homestake Mining. Clark & Elsey *290
Map of operations 289
Mapping and sampling. J. F. Peters *322
Metallurgy. A. J. Clark *298
Natural gas. Bancroft Gore *312
Ore extraction and transportation. A. J. M. Ross *330
Ore genesis and structure. D. H. McLaughlin *324
Organization. B. C. Yates *291
Prime-mover plant and practice. J. D. Johnson *310
Staff co-ordination and production control. R. G. Wayland *293
Welfare. J. R. Treweek *296
Howe Sound n229
Howey Gold—Cyaniding 40-mesh pulp at Red Lake, Ontario. W. M. Goodwin. *109
Mill. W. M. Goodwin c460

I

Idaho-Maryland n33
Indian Copper n274
India's only copper producer. R. B. Woakes *51
Industrial conditions e343
Industrial ministers turn international e391
Inspiration Consolidated n83, n181, n229
Electric shaft elevators. R. I. C. Manning *520
Insulating materials e343
Insulation—Insulation, air conditioning and the mining industry e517
Insurance provision e436
International Mining n36
International Nickel n273
Canadian nickel smelter boasts world's largest pulverized-coal plant. C. F. Herington *219
Inter-State Iron—Open-pit mining. A. H. Hubbell *443, *486
Interstate Zinc & Lead n545

Inventions

Good ideas need commercial exploitation. e146
Scope and encouragement for inventive initiative e147

Iron

Concentration of iron ore by flotation. E. Mayer c416
Ford's Blueberry mine. A. H. Hubbell. *360
Open-pit mining. A. H. Hubbell. *443, *486
Sintering Minnesota iron ore at the Evergreen plant. A. H. Hubbell *244
Hematite flotation, a laboratory success. Adams, Kobey & Sayers 54
Mining in Cumberland, England. Lucien Eaton *455
Mining on the Gobegic Range. A. H. Hubbell *113
Iron Cap n83
Ironton—Open-pit mining. A. H. Hubbell. *443, *486
Island Copper n87
Island Lake n547
Itogon Mining n82

J

Jack Waite Mining n275
Jefferson Lake Oil n466, n507

K

Kaiser Paving Co. — Crushed-stone plant adopts ore-dressing practice. G. J. Young *72
Katherine Gold n130
Kennedy Mining n33, n180
Kenty n376
Kildun Mining n470
Kirchen Monument *183
Kirkland Lake—Geological indications. R. D. Hoffman 425, *493
Kittie Burton n83

Korea

Gold mining. A. A. Friedman *453
Kramat Pulai Ltd. n88

L

Labor

California compensation rates impose heavy surcharge. G. C. Brown c538
Compensation awards e519
Dust eliminators prevent silicosis *16

Helping to suppress tuberculosis is more than a day e519
Lead poisoning checked in Australia... 488
Manhattan mining dust hazards..... e1
Social engineering of Homestake Mining. B. C. Yates *291
Solving the industrial dispute problem...e147
Laboratory. See Research.
Lahat Mines n39, n88
Lake View & Star n38, n131, n510
La Estrella n229
Las Chispas n275
Leaching—Extraction responds to careful technique e518
Leaching extraction by grades, of a typical sand charge. A. J. Clark *298

Lead

Giesche's Erben enterprise. Fritz Lakwey.*151
Materials handling by telpher at Port Pirie smelter *356
Norddeutsche Affinerie. E. van Erckelens.*160
Smelting rich lead products. J. B. Huttl. 262
Leadhill Mines n130
Lee Gold Mines n84
Lehi Tintic n37

Limestone

Crushed-stone and ore-dressing plant. H. D. Keiser *4
Electricity in limestone mining. F. P. Brightman *205
Lime quarry for Miami Mines 35
Quarryng and transporting limestone in Canada. M. F. Goudge *411
Lincoln Gulch Mining n34, n273, n424
Loangwa Concessions n84

Lubrication:

Forced, without a pump e3
Improved practice 224
Luiri Gold n88, n184

M

Magma Copper n83
McLeod River Mining n377

Maintenance:

Bearing repairs *402
Bearings of crankshafts turned....*414
Blower shaft repair *442
Bucket elevators, design and care.... 492
Bushing, bronze, repairs *482
Control and economy devices at Homestake. R. J. Hall *305
Conveyor belts aligned *448
Conveyor tightener prevents slippage... *71
Crankshaft from scrap shafting *69
Drill parts repaired *218
Driving clamp for rectifying car-wheel treads *17
Equipment inspection and repair at Homestake. S. J. Staple *318
Gyratory crusher shaft repair *204
Milling drill-sharpener dollies in lathe.*352
Oil rings improved *494
Paper pulleys repaired *267
Pipe repair *497
Plunger pump repair *490
Proper maintenance of blast-hole drills insures longer life. J. Reynard.... 419
Pump plunger repair. Ernest Maurer...c370
Radius rod balls on Ford trucks remachined *494
Reaming holes in glass *265
Saw-setting jig *359
Sharpening thread cutters *199
Sinking pump repair *20
Sintering machine, costs of maintaining low 463
Slope hoist operation improved *359
Turning crosshead shoes *458
Turning hoisting sheaves *402
Valve, of Diesel engine repaired *67
Valves, turning Diesel engine *535
Maintenance. See also Lubrication.
Mammoth Mining n34
Management—Ford's Blueberry mine. A. H. Hubbell *360
Staff co-ordination and production control of Homestake Mining. R. G. Wayland *293
Mansfeld Mining & Smelting....n232, n380
Mining and smelting at Mansfeld. Emil Schrodter *148
Manufacturing—United States still has its craftsmen e478
Mapeke Asbestos Mines n184
Maps. D. C. Gilbert *18
March Gold n35
Market and financial news....41, 89, 137, 185, 234, 279, 383, 428, 471, 511
Maury Mountain n35
McIntyre Porcupine Mines n469
Mechanization trend will still be forward.e243
Meggen—Mining and concentration. R. Glatzel *155
Metal price curves 47, 192
Metal statistics....46, 143, 239, 342, 433, 515

Metallgesellschaft

Celebrates its fiftieth anniversary *154
Process development and plant construction *172
Research and development work *170

Metallurgy

Berzelius zinc smelters. Seiffert, Koch & Matthies *165
Boleo enterprise. J. B. Huttl *346
Canadian nickel smelter boasts world's lagest pulverized-coal plant. C. F. Herington *219
Comparing per-ton grinding costs e242
Cyaniding 40-mesh pulp at Red Lake, Ontario. W. M. Goodwin....*109
Gold and silver recovery from tin slime. J. B. Kasey 217
Materials handling by telpher at Port Pirie lead smelter *356
Milling, amalgamation, cyaniding at Homestake. A. J. Clark *298
Multiple-hearth furnace is receiving more attention for roasting quicksilver ores *127
Mining and smelting at Mansfeld. Emil Schrodter *148
Norddeutsche Affinerie. E. van Erckelens.*160
Quicksilver metallurgy. C. N. Schuette..*398
Sintering machine maintenance costs low 463
Sintering Minnesota irno ore at the Evergreen plant. A. H. Hubbell....*244
Smelting copper ore in Baja California. M. Bellanger *440
Smelting rich lead products. J. B. Huttl 262
Suggestions for converter operators. F. E. Wing c537
Sulphuric acid by the Petersen tower process. Hans Schutt 249

Metals

Building with metals offers great opportunities e193
Building with metals offers opportunities.e345
Why not more metallic publicity for the metals? e243
Mexican Corp. n507

Mexico

Boleo enterprise. J. B. Huttl *346
New labor and tax laws in operation..n228
Stops coining gold n132
Miami Copper n83, n181, n380

Mine Timbers

Elsing sublevel shrinkage method of stoping. J. B. Huttl *531
Hanging bolts in cribbing *452
Schaefer concrete arch supports for mine roofs. E. H. Robie *111
Top-slicing and timber recovery. Fernando Montijo c*461
Mineral Veins Coalition n37

Mining

Mine costs. M. J. Elsing 106
Miner on his own *175
New producers and the consumption factor e2
Ore-dressing plants and construction materials e98
Questionable methods of financing mines.e345
Road building, automobiles, and the mining industry e392
Uncontrolled individualism and its aftermath e241
Unintelligent criticism should be ignored.e193

Mining Methods

Asphalt mining in Cuba. A. E. Northey. *66
Bauxite mining in Arkansas *449
Boleo enterprise. J. B. Huttl....*346
British South Africa. W. B. Timm.... *22
Caving methods. A. S. Dwight, M. J. Elsing 12, c175
Cement materials mined and processed. J. B. Nealey *63
China clay in Cornwall. E. H. Davison.*264
Copper mining in Baja California. M. Bellanger *394
Cost of mucking. M. J. Elsing 207
Crushed-stone and ore-dressing plant. H. D. Keiser *4
Diamond mining in Borneo. S. H. Ball. 200
Elsing sublevel shrinkage method of stoping. J. B. Huttl *531
Empire Zinc Company's operation at Gilman, Colorado. W. O. Borcherdt.*99, *251
Exploration methods and costs at Empire Zinc at Gilman. H. N. Lary *353
Ford's Blueberry mine. A. H. Hubbell..*360
Giesche's Erben enterprise. Fritz Lakwey.*151
Gold mining in Korea. A. A. Friedman.*453
Gold-ore mining and milling—Sixteen-to-One. G. J. Young *195
Iron mining in Cumberland, England. Lucien Eaton *455
Iron mining on the Gogebic Range. A. H. Hubbell *113
Lime quarry for Miami mines 35
Mining and concentration at Meggen. R. Glatzel *155
Mining and smelting at Mansfeld. Emil Schrodter *148
Open-pit mining. A. H. Hubbell..*443, *486
Ore extraction and transportation at Homestake. A. J. M. Ross *330
Platinum mining in Sierra Leone. J. D. Pollett *407
Practices ten years hence. Frederick MacCoy c125
Salt mining with electric equipment. Leo Reid *405
Schaefer concrete arch supports for mine roofs. E. H. Robie *111
Shaft mucking with a scraper. A. H. Hubbell 124
Shaft sinking cost. M. J. Elsing.... 349
Supporting excavations on the Witwatersrand. A. G. Boyden *8
Mining share prices.....48, 144, 240, 390, 434, 516
Mining & Metallurgical Society—Meeting. 509
Mines de Villemagne n136
Mohawk Mining n37, n135, n273, n381
Montreal Mine—Details of practice at mine. A. H. Hubbell *113
Moss Gold Mines n228
Motors—Automatic control of mine plant motors. H. W. Chadbourne....*534
Mount Coolon Gold n232
Mount Isa n39, n88, n423
Solving the industrial dispute problem.e147
Mount Lyell n131, n469
Mucking costs. M. J. Elsing 207
Mufulira Copper n232, n549
Murchie Mines n33, n544
Mysore Gold n136

N

Nabesna Gold n423
National Exploration n380
Natural gas—Auxiliary fuel at Homestake. Bancroft Gore *312
Natural gas in Colorado. R. D. George. c29
Nevada Consolidated Copper....n33, n35, n547
Electric shaft elevators. R. I. C. Manning *520
New Guinea Goldfields....n423
New Jersey Zinc n132
Empire Zinc Company's operation at Gilman, Colorado. W. O. Borcherdt.*99, *251
Empire Zinc uses two kinds of samplers. I. S. Heller 480
Exploration methods and costs at Empire Zinc at Gilman. H. N. Lary *353
Underground mill of, at Gilman, Colorado. W. O. Borcherdt *251
New Modderfontein n424
Newmont Mining n33
Newport Mine—Shaft sinking and electrification. A. H. Hubbell *213
Nickel—Canadian nickel smelter boasts world's largest pulverized-coal plant. C. F. Hernigton *219
Nipissing Mines n505, n547
Nitrates—Origin of Chilean nitrate. J. C. Davey c416
Re-treatment of residue dumps e2
Nogal Canyon n467
Non-metallics — Automatic processing of non-metallics c393
Improved technique in processing.....e517
Noranda Mines n132, n424
North Broken Hill n510
North Butte Mining n85

North Lily-Knight n34
Northwest Magnesite n506
Northwest Mining Assn. n546
Nourse Mines—Deep-level pumping *410
Nundydroog Mines n39, n88

O

Obituary

Acheson, Dr. Ed. Goodrich 78
Agnew, John Lyons 78
Badgley, Charles W. 223
Bagg, Stanley C. 416
Benham, Frost L. 29
Blackmer, W. D. 176
Bradford, R. H. 538
Callender, W. D. 499
Carlton, Albert E. 268
Chapman, George Albert 223
Clement, Harrison E. 29
Cook, R. A. 126
Cooley, George E. 176
Crampton, Theo. H. M. 372
Corwin, Frank R. 268
Davey, Bruce C. 461
DeKalb, Courtenay 223, 372
Devereux, James Henry 29
Doude, Edmund F. B. 499
Eakle, Dr. Arthur Starr 78
Forstner, William 29
Francis, Capt. George 461
Gerster, J. J. 416
Hall, Everett J. 371
Hammond, Mrs. John Hays 29
Hess, Rush M. 176
Heffman, Henry Charles 416
James, Alfred 372
James, Alfred Trewartha 273
James B. Adair 126
Jordan, F. S. 538
Kaufman, Louis 499
Kitson, Howard W. 371
Kilinski, E. A. 176
Kup, C. F. W. 371
Lewis, Carl 538
Mackenzie, George C. 223
Mears, Otto 29
MacLaren, Charles J. 416
Mather, Samuel 416
Penrose, Dr. R. A. E., Jr. 126
Pickrell, A. J. 416
Pickett, William 416
Powers, Frank 78
Renner, W. L. 268
Rex, W. M. 538
Rockwood, N. C. 538
Rourke, Jeremiah 268
Rusterholz, R. W. 29
Saunders, Philip 78
Saunders, W. L. 29
Sawbridge, John 268
Sheldon, John 499
Smith, C. G. 29
Smith, Francis M. 223
Thomas, Kirby 29
Tomlinson, Joseph B. 78
Tower, Joseph T., Jr. 223
Treadwell, John B. 461
Trezona, Charles 78
Wayland, Russell G. 499
Wells, James S. Chester 416
Winslow, George A. 268
Octave n547
Ohio Copper—caving methods. M. J. Elsing 12
Ohio Keating n37, n273
Okanagan, B. C., placer find n131
Old Dominion n272, n506
Oliver Iron Mining n381
Oro Grande n381

P

Pacific Mine n545
Pahang Consolidated n427, n510
Pan-American Commercial Conference.376, n376
Panama Corp. n82
Park Bingham Mining..... n34
Park City Consolidated..... n34
Parmelee, H. C. n470
Patents—Ruth and Greenawalt win suits. 36
Patino Mines & Enterprises.....n273
Pend Oreille Mines & Metals n466

Peru

Gold in southeast Peru. Fernando Fuchs c370
Phelps Dodge n37, n83, n132, n229, n274, n275 n423, n547
Electric shaft elevators. R. I. C. Manning *520
Preventing accidents by pictorial comparison of safe and unsafe practice.. *56
Phosphate—Geology and origin of the phosphate deposits of Tennessee. R. W. Smith *58
Hydraulic classification raises washery efficiency. R. G. O'Meara.....*529
Phosphate shell deposit at Corpus Christi may be sold..... 36
Photo-electric cell—setting light to work in industry e242
Pickands Mather & Co.—open-pit mining. A. H. Hubbell.....*443, *486
Pioneer Gold—British Columbia's potential bonanza. I. B. Joralemon.....*483
Platinum—Mining in Sierra Leone. J. D. Pollett *407
Potash—U. S. Bureau of Mines to drill in Utah n133
Potgietersrust Platinums n232
Potosi Mining n229
Powderly Mine — Schaefer concrete arch supports for mine roofs. E. H. Robie..*111

Power

Automatic control of mine plant motors. H. W. Chadbourne.....*534
Electricity in limestone mining. F. P. Brightman *205
Homestake plant and practice. J. F. Wiggert *316
Motor-coil winding machine.....*112
Plants provide important mercury outlet e392
Power plant at Ahmeek Mill..... 30
Prime-mover plant and practice at Homestake. J. D. Johnson.....*310
Project to serve Ontario mines..... 87
Shaft sinking and electrification at Newport Mine. A. H. Hubbell.....*213
Pre-Cambrian publicity. C. M. Campbell, *209; F. L. Garrison.....c371
Prices, stable e393

Prospecting

Bolivia — prospecting and exploration. J. B. Chamberlain.....*437
Borehole estimation. C. E. Temperley..*528
Gold, aided by light-weight core drills. Jessen & Lindhe.....*373
Pre-Cambrian publicity. C. M. Campbell.*209
Pre-Cambrian publicity. F. L. Garrison.c371
Prospecting-pan shortage is good news.. e50
Student recovers $1,700 gold from placer operations 82
Test Missouri River placers.....n133
Pumps and pumping—Deep-level pumping.*410
Pyrites — Mining and concentration at Meggen. R. Glatzel.....*155

Q

Quicksilver

Limiting factors in quicksilver metallurgy. C. N. Schuette.....*398
Multiple-hearth furnace is receiving more attention for roasting quicksilver ores *127
New discoveries. W. M. Weigel.....*495
Power plants provide important mercury outlet e392
Quincy Mining n37, n135, n274

R

Refining

New method for Texas potash ore....n509
Norddeutsche Affinerie. E. van Erckelens *160
Quebec's first copper refinery open..... 37
Republic Mining & Mfg. Company—bauxite mining in Arkansas.....*449

Research

Calibrating testing screens..... 420
Germany — research and development work *170
Laboratory combination of fume hood and hot-plate table.....*221
Technologic unemployment of commodities e3
Rhodesia—freight rates 84
Rhodesia Broken Hill Development....n39, n136, n232
Rhokana Corp.....n39, n184, n230, n510, n379, n549, n469
Richmond Iron Company—open-pit mining. A. H. Hubbell.....*443, *486
Roan Antelope n39, n184, n232, n274, n379, n427, n469, n505, n510, n549
Rooiberg Minerals n136
Russell-Kent Mining n33

S

Safety

Accident avoidance and the language problem e50
Accident prevention and safety assurance at Homestake. J. R. Treweek.....*296
Compensation awards e519
Dust eliminators prevent silicosis..... *16
Ground pressure and movement indicated by two devices..... *79
Health protection and hospital service at Homestake. R. B. Fleeger.....*334
Helping to suppress tuberculosis is more than a duty.....e519
Lead poisoning checked in Australia... 488
Preventing accidents by pictorial comparison of safe and unsafe practice.. *56
Safety Council attacks fundamental problems e241
St. Joseph Lead n469
St. Mary's Mineral Land.....n467, n509
Salduro deposit n380
Salt mining with electric equipment. Leo Reid *405
Samoa Gold n131
San Francisco Mines of Mexico.....n378
San Rafael n38
Scossa gold strike.....n227
Scrub Oaks—Crushed stone and concrete sand from mine waste and mill tailing. A. H. Hubbell.....*526
Seneca Copper n273

Shafts

Cost of shaft sinking. M. J. Elsing.... 349
Electric shaft elevators insure safety and economy. R. I. C. Manning.....*520
Electrification and shaft sinking at Newport Mine. A. H. Hubbell.....*213
Moving an iron-country headframe....*369
Reel simplifies shaft plumbing..... *71
Shaft mucking with a scraper. A. H. Hubbell 124
Ventilation shaft construction..... 199
Shanjay Quicksilver n228
Shattuck Denn n466
Sidney Mining n130
Sierra Leone platinum mining. J. D. Pollett *407

Silver

Gold and silver recovery from tin slime. J. B. Kasey..... 217
Mining and smelting at Mansfeld. Emil Schrodter *148
Pacific Trade Council discuss.....n276
Smoot urges use for debt payments....n545
Silver King Coalition Mines.....n180
Silver King Western Mining & Milling....n377
Sinai Mining n427
Siscoe Gold n131
Sixteen-to-One Mine—gold-ore mining and milling. G. J. Young.....*195
Smuggler Mining n87
Society of Chemical Industry—Celebrates its jubilee e145
Standardization — Order out of chaos through standardization e50
Screening data standardization urged. C. E. Bartlett.....c460
Steel treatment in British Columbia. N. Thompson c78
Stibnite developed n422
Sub Nigel n424
Sulphur—Found near Rio Grande, Mexico 35
Sulphide Corp. n39
Sulphuric acid by the Peterson tower process. Hans Schutt..... 249

e editorial; n news; c comment and criticism

Surveys & Surveying

Direction lines for drift curves. K. L. Bockman *203
Mine mapping and sampling at Homestake. J. F. Peters..... *322
Susquehanna Ore Company—open-pit mining. A. H. Hubbell..... *443, *486
Swisshelms n278
Sylvanite Gold n272

T

Tailings, Inc. n467
Tanganyika Concessions n136
Taquah & Abosso n88, n427
Teck-Hughes n228, n466
Telpher system for materials handling at Port Pirie lead smelter..... *356
Tennessee — phosphate deposits. R. W. Smith *58
Tennessee Coal & Iron Co. n330
Thompson, Weinman & Co.—Barytes producer enters washed-gravel industry. H. D. Keiser..... *266
Tigon Mining & Finance..... n136
Tin—Gold and silver recovery from tin slime. J. B. Kasey..... 217
Tintic district n34
Tocopilla Mining n37
Tom Reed Gold n135, n549
Tonopah Belmont Development..... n34
Tonopah Extension n467, n506
Tonopah Hasbrouck n82
Towagmac Exploration n85

Transportation

Electricity in limestone mining. F. P. Brightman *205
Empire Zinc Company's operation at Gilman, Colorado. W. O. Borcherdt.... *99
How attention to traffic conditions cuts costs. A. L. Russell..... 451
Iron mining on the Gogebic Range. A. H. Hubbell *113
Ore extraction and transportation at Homestake. A. J. M. Ross..... *330
Overhead contact system..... *21
Quarrying and transporting limestone in Canada. M. F. Goudge..... *411
Telpher system for materials handling at Port Pirie lead smelter..... *356
Transportation, see also Equipment, Maintenance.
Transvaal platinum mines..... n232
Treadwell Yukon..... n230, n376, n425, n465
Trepca Mines n184, n279, n425
Tri-State Zinc Assn. n507
Turner, M. Scott..... e478

U

Unemployment—All should share the unemployment burden e477
Challenge to education..... e435
Technical application of practical unemployment relief 459
Union Corp. n136
Union Miniere du Haut-Katanga..... n84
Union of South Africa—Mining in British South Africa. W. B. Timm..... *22
United American Mining n425
U. S. Brucite Corp. n85
U. S. Bureau of Mines—To drill for potash in Utah n133
United States Gypsum—conductor tension in electric haulage..... *21
U. S. Potash..... n85
U. S. Smelting, Refining & Mining..n33, n180 n379
United Verde Copper.....n35, n83, n181, n275 n382
New type all-metal ventilation door. O. A. Glaeser..... *366
United Verde Extension..n34, n83, n130, n275 n382, n422, n740
Universal Exploration Co.—crushed stone and ore-dressing plant. H. D. Keiser... *4
Utica Mine—moving an iron-country headframe *369

V

Vanderbilt Gold n33
Ventilation—New type all-metal ventilation door. O. A. Glaeser..... *366
Ventilation shaft construction..... 199
Ventures Ltd. n37, n136
Vermont Asbestos Corp.—asbestos in Vermont. F. A. Westbrook..... *491
Victoria Gold n38
Vigilante Mining Assn. n34, n469
Vinegar Hill Zinc..... n275
Virginia Hope Mines..... n273
Vulture Mining & Milling..... n227

W

Walker Mining n85
White Bear Mining..... n276
White Water n509
Wiluna Gold n88, n184
Wisconsin Steel n381
Witherite found in Alaska 422
Witwatersrand n181, n510
Supporting excavations on the Witwatersrand. A. G. Boyden..... *8
Wright-Hargreaves n180, n425

Y

Yellow Pine n465
Yellowgold Mining & Milling..... n504

Z

Zinc

Analysis of electrolytic zinc. Slavin & Hamilton c28
Berzelius zinc smelters. Seiffert, Koch & Matthies *165
Crushed-stone and ore-dressing plant. H. D. Keiser..... *4
Empire Zinc Company's operation at Gilman, Colorado. W. O. Borcherdt *99, *251
Exploration methods and costs at Colorado mine. H. N. Lary..... *353
Giesche's Erben enterprise. Fritz Lakwey *151
May have a promising future..... e194
Zinc Corp. n39

e editorial; n news; c comment and criticism

Index of Authors

Adams, A. S., S. M. Kobey and M. J. Sayers: Flotation of hematite a laboratory success 54

Ball, Sidney H.: Diamond mining in Borneo 200
Bartlett, C. E.: Standardization of screening data urged c460
Bellanger, M.: Mining copper in Baja California *394
Smelting copper ore in Baja California.*440
Bellinger, B. W.: Dredge-sluice efficiency. 403
Bockman, K. L.: Direction lines for drift curves *203
Bond, F. C.: Calculating average particle size from screen analysis..... 15
Borcherdt, W. O.: Empire Zinc Company's operation at Gilman, Colorado...*99, *251
Boyden, Arthur G.: Supporting excavations on the Witwatersrand..... *8
Brightman, F. P.: Electricity in limestone mining *205
Brown, G. Chester: California compensation rates impose heavy surcharge....c538

Campbell, C. M.: Pre-Cambrian publicity.*209
Campbell, E. E.: Facts vs. fiction about Great Bear Lake.....c500
Chadbourne, H. W.: Automatic control of mine plant motors *534
Chamberlain, James B.: Prospecting and exploration in Bolivia.....*437
Clark, Allan J.: Metallurgy.....*298
Clark, Edward H. and Fred T. Elsey: History of Homestake Mining.....*290
Colvocoresses, G. M.: Gold properties offer opportunity for mining company diversification c174

Davey, J. C.: Origin of Chilean nitrate..c416
Davison, Ernest H.: Cornish China clay..*264
Dwight, Arthur S.: Caving methods.....c175

Eaton, Lucien: Iron mining in Cumberland, England *455
Elsey, Fred T. and Edward H. Clark.: History of Homestake Mining.....*290
Elsing, Morris J.: Caving methods...12, c175
Cost of mucking..... 207
Cost of shaft sinking..... 349
Mine costs 106

Fleeger, R. B.: Health protection and hospital service 334
Friedman, A. A.: Gold mining in Korea..*453
Fuchs, Fernando: Gold in southeast Peru.c370

Garrison, F. Lynwood: Pre-Cambrian publicity c371
Gaudin, A. M.: Flotation reagents..... 70
George, R. D.: Natural gas in Colorado.. c29
Gilbert, D. C.: Mine maps: their preparation, correlation, and maintenance... *18
Glaeser, Oscar A.: New type all-metal ventilation door *366
Glatzel, R.: Mining and concentration at Meggen *155
Goodwin, W. M.: Cyaniding 40-mesh pulp at Red Lake, Ontario.....*109
Howey Gold mill.....c460
Gore, Bancroft: Natural gas at the Homestake *312
Goudge, M. F.: Quarrying and transporting limestone in Canada.....*411

Hall, R. J.: Control and economy device..*305
Hamilton, William O. and Morris Slavin: Analysis of electrolytic zinc..... c28
Hansen, Mahlin S.: Extension of the flotation process into new fields.....c416
Heller, I. S.: Automatic pulp sampling and distribution *480
Herington, C. F.: Canadian nickel smelter boasts world's largest pulverized-coal plant *219
Herz, Nathaniel: Fire and chemical analysis *308
Hoffman, R. D.: Geological indications at Kirkland Lake *493
Homer, D. D.: Rubber pipe lining minimizes pulp abrasion.....*367
Hubbell, A. H.: Crushed stone and concrete sand from mine waste and mill tailing *526
Ford's Blueberry mine has unique plant *360
Iron mining on the Gogebic Range.....*113
Open-pit mining *443, *486
Shaft mucking with a scraper..... 124
Shaft sinking and electrification at the Newport Mine *213
Sintering Minnesota iron ore at the Evergreen plant *244
Huttl, John B.: Boleo enterprise.....*346
Elsing sublevel shrinkage method of stoping *531
Smelting rich lead products..... 262

Jessen, Lewed L. and Fred E. Lindhe. Gold prospecting facilitated by lightweight core drills.....*373
Johnson, J. D.: Prime-mover plant and practice *310
Joralemon, Ira B.: Pioneer Gold: British Columbia's potential bonanza.....*483

Kasey, John B.: Gold and silver recovery from tin slime..... 217
Keiser, H. D.: Barytes producer enters washed-gravel industry *266
Crushed-stone and ore-dressing plant—profitable combination *4
Kobey, S. M., A. S. Adams and M. J. Sayers. Flotation of hematite a laboratory success 54
Koch, Erich, R. Seiffert and Hermann Matthies: Berzelius zinc smelters.....*165

Lakwey, Fritz: Giesche's Erben enterprise *151
Lary, Howard N.: Exploration methods and costs at a Colorado zinc mine...*353
Lindhe, Fred E. and L. L. Jessen. Gold prospecting facilitated by light weight core drills *373
Low, Bela: Determining results graphically in one-product concentration.....*524

Manning, R. I. C.: Electric shaft elevators insure safety and economy.....*520
Matthies, Hermann, R. Seiffert and Erich Koch: Berzelius zinc smelters.....*165
Maurer, Ernest: Pump plunger repair....c370
Mayer, E.: Concentration of iron ore by flotation c416
MacCoy, Frederick: Mining practices ten years hence c125
McDonald, P. B.: Professor's personalities c461
McLaughlin, Donald H.: Ore genesis and structure *324
Mifflen, Sydney C.: Bin-wall pressure chart 65
Rope-drum chart 248
Suspension bin chart 498
Montijo, Fernando: Top-slicing and timber recovery c*461

Nealey, J. B.: Mining and processing of cement materials *63
Northey, Arthur E.: Mining asphalt in Cuba *66

O'Meara, R. G.: Hydraulic classification raises phosphate washery efficiency..*529

Peters, L. F.: Mine mapping and sampling.*322
Pickett, G. W.: Ball milling and amalgamation in lower California..... c29
Pollett, J. D.: Platinum mining.....*407
Prendergast, John W.: Conservative development of gold prospects.....c371

Rego, Luis Florex de Moraes: Copper resources of Brazil..... 401
Reid, Leo: Mining salt with electric equipment *405
Reynard, J.: Proper maintenance of blasthole drills insures longer life..... 419
Robbins, P. A.: Extraction and recovery of gold c78
Robie, Edward H.: Schaefer concrete arch supports for mine roofs.....*111
Ross, A. J. M.: Ore extraction and transportation *330
Russell, A. L.: How attention to traffic conditions cuts costs..... 451
Traffic problems in the mining industry c537

Sayers, M. J. and A. S. Adams and S. M. Kobey: Flotation of hematite a laboratory success 54
Schrodter, Emil: Mining and smelting at Mansfeld *148
Schuette, C. N.: Limiting factors in quicksilver metallurgy *398
Schutt, Hans: Sulphuric acid by the Petersen tower process 249
Seiffert, R., Erich Koch and Hermann Matthies: Berzelius zinc smelters...*165
Slavin, Morris and W. O. Hamilton, Jr.: Analysis of electrolytic zinc..... c28
Smith, Richard W.: Geology and origin of the phosphate deposits of Tennessee *58
Staple, Sydney J.: Equipment inspection and repair *318
Strauss, S. D.: Copper production costs in the Americas in 1930..... 68
Gold mining—facts and figures..... 335

Temperley, C. E.: Borehole estimation...*528
Thompson, N.: Steel treatment in British Columbia c78
Timm, W. B.: Mining in British South Africa *22
Treweek, John R.: Safety assurance and accident prevention *296

Van Erckelens, E.: Norddeutsche Affinerie *160

Wayland, R. G.: Staff co-ordination and production control *293
Weigel, W. M.: New quicksilver discoveries *495
Westbrook, Francis A.: Asbestos in Vermont *491
Wiggert, J. F.: Plant and practice in electric operation *316
Wing, F. E.: Suggestions for converter operators c537
Woakes, R. B.: Common sense, plus experience, superior to technical training c222
India's only copper producer—the Indian Copper Corporation *51

Yates, B. C.: Organization of Homestake Mining *291
Young, G. J.: Crushed-stone plant adopts ore-dressing practice *72
Gold-ore mining and milling—Sixteen-to-One *195
Setting small, uniformly sized bort in core drill bits.....*501
Summarizing Consolidated Mining & Smelting's activities *120

e editorial; n news; c comment and criticism